

REMARKSClaim Rejections 35 U.S.C. § 102 (e)

The Examiner has rejected claims 1-26 under 35 U.S.C. § 102 (e) as being anticipated by Szmandra et al. (U.S. 6,787,286).

Claims 1-12

Applicants respectfully disagree with the Examiner. Applicants have amended claims 1-12. Support is provided in paragraphs [0021]-[0024] of the specification.

Claim 1, as amended, of Applicants' claimed invention claims a method (200) including: determining (205) an index-matching liquid; determining (210) a set of one or more constituents based on the index-matching liquid; providing (not shown) a photoresist; adding (215) the set of one or more constituents to the photoresist; and altering liquid-contact properties of the photoresist. See Figure 2.

In contrast, the method of the Szmandra et al. reference cited by the Examiner fails to teach determining an index-matching liquid; determining a set of one or more constituents based on the index-matching liquid; providing a photoresist; adding the set of one or more constituents to the photoresist; and altering liquid-contact properties of the photoresist. Thus, Szmandra et al. does not teach each and every element of Applicants' invention, as claimed in claim 1, as amended.

Consequently, Szmandra et al. does not anticipate claim 1, as amended, of Applicants' invention.

Claims 2-12, as amended, of Applicants' claimed invention, are dependent on claim 1, as amended, of Applicants' claimed invention. Thus, Szmandra et al. also does not teach each and every element of Applicants' invention, as claimed in claims 2-12, as amended. Consequently, Szmandra et al. also does not anticipate claims 2-12, as amended, of Applicants' invention.

In view of the foregoing, Applicants respectfully request the Examiner to withdraw the rejections to claims 1-12 under 35 U.S.C. §102 (e).

Claims 13-26

Applicants respectfully disagree with the Examiner. Applicants have amended claims 13-26. Support is provided in paragraphs [0025]-[0028] and [0029]-[0033] of the specification.

Claim 13, as amended, of Applicants' claimed invention claims an apparatus (300, 400) including: a substrate (301, 401); a photoresist (302, 402) deposited on the substrate, the photoresist having incorporated therein one or more additives that alter liquid-contact properties of the photoresist; an index-matching liquid (303, 403) located in contact with the photoresist; and a last lens element (304, 404) located in contact with the index-matching liquid. See Figures 3-4.

In contrast, the method of the Szmandra et al. reference cited by the Examiner fails to teach a substrate covered with a photoresist, the photoresist incorporating one or more additives that alter liquid-contact properties of the photoresist; an

index-matching liquid located in contact with the photoresist; and a last lens element located in contact with the index-matching liquid.

Thus, Szmandra et al. does not teach each and every element of Applicants' invention, as claimed in claim 13, as amended. Consequently, Szmandra et al. does not anticipate claim 13, as amended, of Applicants' invention.

Claims 14-26, as amended, of Applicants' claimed invention, are dependent on claim 13, as amended, of Applicants' claimed invention. Thus, Szmandra et al. also does not teach each and every element of Applicants' invention, as claimed in claims 13-26, as amended. Consequently, Szmandra et al. also does not anticipate claims 13-26, as amended, of Applicants' invention.

In view of the foregoing, Applicants respectfully request the Examiner to withdraw the rejections to claims 13-26 under 35 U.S.C. §102 (e).

Claim Rejections 35 U.S.C. § 103 (a)

The Examiner has rejected claims 27-30 under 35 U.S.C. §103 (a) as being unpatentable over Sewell (U.S. 6,809,794) in view of Szmandra et al. (U.S. 6,787,286).

Applicants respectfully disagree with the Examiner. Applicants have amended claims 27-30. Support is provided in paragraphs [0025]-[0028] and [0029]-[0033] of the specification.

Claim 27, as amended, of Applicants' claimed invention claims a system 9300, 400) including: a last lens element (304, 404) of a lithography exposure system, the last lens element having a specific index of refraction; an index-matching liquid (303, 403) in contact with the lens element, the index-matching liquid having an index of refraction equal to the specific index of refraction to within a specified tolerance; and a photoresist layer (302, 402) in contact with the index-matching liquid, the

photoresist layer composed of photoresist having incorporated therein one or more constituents that improve the contact between the index-matching liquid and the photoresist layer. See Figures 3-4.

In contrast, a combination of the system of Szmandra et al. and the system of Sewell would still not produce the system of Applicants' claimed invention, as claimed in claim 27, as amended. Consequently, the two cited patents, whether individually or collectively, do not render obvious claim 27, as amended, of Applicants' claimed invention.

Claims 28-30 are dependent on claim 27. A combination of the system of Szmandra et al. and the system of Sewell would still not produce the system of Applicants' claimed invention, as claimed in claims 28-30, as amended. Consequently, the two cited patents, whether individually or collectively, do not render obvious claims 28-30, as amended, of Applicants' claimed invention.

In view of the foregoing, Applicants respectfully request the Examiner to withdraw the rejections to claims 27-30 under 35 U.S.C. §103 (a).

Conclusion

Applicants believe that all claims pending, including claims 1-30, are now in condition for allowance so such action is earnestly solicited at the earliest possible date.